

REMARKS

CLAIM AMENDMENTS

Claim 6 is amended herein through incorporation of the subject matter previously recited by claims 7 and 11, which have been canceled. Formalistic amendments have been made to claims 8-10 and 12.

OBJECTIONS AND REJECTIONS UNDER 35 USC §112, ¶2

Applicants respectfully submit that the above amendments to claims 8-10 and 12 are sufficient to overcome the examiner's objections and concerns under 35 USC §112.

REJECTION UNDER 35 USC §102(B)

The examiner has rejected claims 6, 8-10, 12 and 13 under 35 USC §102(b) as anticipated by Seiler et al. (US 4,939,201) and Lausberg et al. (US 4,940,746), individually. These rejections are respectfully traversed. Neither Seiler et al. (U.S. 4,939,201) nor Lausberg et al. (U.S. 4,940,746) anticipate moldings composed of components A - D (and optionally E and F), as defined in amended claim 6. Seiler mentions polyethylene terephthalate or polybutylene terephthalate or mixtures thereof as polyesters (component a₁ of the thermoplastic molding compositions of Seiler) in col. 2, lines 48 - 51. So does Lausberg in col. 2, lines 44 - 47. However, none of them discloses the mixing ratio of from 60 - 99% by weight of PBT and from 1 - 40% by weight of PET.

Seiler discloses an average particle size within the range from about 200 -700

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nm and a narrow particle size distribution for the graft polymer (component a₂ of the thermoplastic molding compositions) in col. 3, lines 49 -52. So does Lausberg in col. 3, line 42/43. However, none of them discloses the bimodal particle size distribution of the graft copolymer of the moldings according to the invention (component C of amended claim 6). Quite to the contrary, the graft copolymers according to Seiler and Lausberg preferably have a narrow particle size distribution.

Thus, amended claim 6 is not anticipated by Seiler or Lausberg.

REJECTION UNDER 35 USC §103(A)

The examiner has rejected the following claims for obviousness under 35 USC §103(a): claim 7 over either Seiler or Lausberg, claim 11 over either Seiler or Lausberg, in view of Binsack et al. (US 4,535,124), claims 6-10, 12 and 13 over McKee et al. (US 5,219,915), claim 11 over McKee in view of Binsack, claims 6-13 over Binsack, and claims 6-13 over Seiler et al. (DE 37 33 839).

It is an object of the present invention to provide moldings for use in the interior of motor vehicles, which in particular have good emission performance and odor performance. This object is achieved by the inventive moldings. The superior emission characteristics of the moldings according to the invention are clearly demonstrated by examples 1 - 3 as compared to the comparative example.

The invention thus resides in the specific composition of the moldings according to the invention and in the specific composition of the components used therein, which result in particularly good emission and odor characteristics. These characteristics

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make the moldings of the present invention particularly suited for use in motor vehicle interiors.

The instant invention results in moldings with improved emission performance (see tables 1 and 2). The comparative example contains a styrene-acrylonitrile (SAN) copolymer containing 35% by weight of acrylonitrile as component C, which is outside the claimed range for acrylonitrile in component C, which range is from 10 to only 25% by weight. Inventive example 1 contains a SAN-copolymer containing only 19% by weight (PSAN1), examples 2 and 3 contain a SAN-copolymer containing only 25% by weight of acrylonitrile (PSAN2). Please note the results of the odor test to PV 3900 C3 and the carbon emission to PV 3341 given in table 2. The results demonstrate a much better performance of the inventive moldings, as compared to the comparative example.

Criticality of a claimed range is demonstrated by unexpected results, and is evidence of nonobviousness (*In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)). It is submitted that such unexpected results have been clearly demonstrated by the examples 1 - 3 and the comparative example. There is no hint in Seiler or Lausberg to substitute the graft copolymer a_2 having a narrow particle size distribution with the graft copolymer component C having a bimodal particle size distribution in order to arrive at the inventive moldings having improved emission and odor characteristics.

The same hold for the claim rejections for unpatentability over Seiler or Lausberg further in view of Binsack. There is no hint in Binsack that a specific combination of

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polyesters A, the SAN-copolymer C and the graft copolymer of Binsack having a bimodal particle size distribution leads to moldings having improved odor and emission characteristics. Thus, there was no motivation for the artisan to combine either Seiler or Lausberg with Binsack to arrive at the present invention.

With respect to the claim rejections for unpatentability over McKee et al., it is again submitted that unexpected results have been clearly demonstrated by examples 1 - 3 and the comparative example. The graft copolymer used in McKee has a median particle size of from 50 - 1000 nm (col. 4, lines 12 - 14) with no indication of a bimodal particle size distribution, and the weight ratio of styrene/acrylonitrile is 65:35, as recognized by the examiner (see example). However, the SAN-copolymer used according to McKee corresponds to PSAN3 as used in the comparative example of the present application, and examples 1 - 3 clearly demonstrate that an unexpected improvement of the emission performance and odor performance can be obtained by choosing a SAN copolymer having a low acrylonitrile content, as claimed in amended claim 6.

The same hold for the rejection of the claims for unpatentability over McKee further in view of Binsack. The ungrafted SAN resin present in the molding compositions of Binsack contain a much higher proportion of acrylonitrile than as claimed in amended claim 6 (see col. 14, lines 52 -55, referred by the examiner, and table 4: the acrylonitrile content of the SAN resin in products N, O and P is 8, 4:(21, 6+8,4)=28% by weight; see also col. 14, lines 57 -60).

Thus, even the combined teachings of McKee and Binsack do not lead to the

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present invention, since the low acrylonitrile content of component C of the inventive moldings is not disclosed in either of the references McKee and Binsack references. The same holds for the rejection of the claims as being unpatentable over Binsack et al. alone. Again, the low acrylonitrile content of the SAN component is not suggested in Binsack. Evidence of unexpected results is given in the examples.

Applicants respectfully request that the rejection of claims 6, 8-10 and 12-13 under 35 USC §103(a) be withdrawn.

DOUBLE PATENTING REJECTIONS - TERMINAL DISCLAIMER

Applicants disclaim any portion of the term of any patent resulting from the present prosecution beyond that patent term associated with US 6,174,958, US 6,479,617, and any patent resulting from prosecution of US patent application Serial No. 09/889,402. In light of this disclaimer, applicants respectfully request that the double patenting rejections be withdrawn.


CONCLUSION

In view of the present amendments and remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

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Respectfully submitted,
KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read "David C. Liechty", with a long horizontal line extending to the right.

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